

IN THE SPECIFICATION

Please substitute the following paragraph for paragraph [17] of the specification.

FIG. 3A-3C 3D: Impulse propagation. Voltage maps and optical action potentials during propagation of an impulse 50 ms after the stimulus in (FIG. 3A) an NRVM-only monolayer (control, n=7) and (FIG. 3B) a 1:4 Lv-GFP co-culture (n=6). The propagation wavefront is irregular in the co-culture, and propagation is very delayed compared to control. ~~(The color bar in the figure corresponds to normalized voltage level, with blue being the resting state and red being peak of action potential.)~~ Bar graphs display (FIG. 3C) conduction velocity and (FIG. 3D) APD80 (action potential duration at 80% of repolarization) in NRVM-only controls and 1:4 LvGFP co-cultures. Conduction velocity is significantly decreased, while APD80 is significantly increased in co-cultures containing Lv-GFP-transduced myoblasts compared to controls.